

In the Claims:

Please cancel Claims 1, 2, 6, 37-39 and 48, without prejudice; and amend Claims 3, 5, and 40-43 as indicated below. The status of all claims is as follows:

1-2. (Cancelled)

3. (Currently Amended) An embedded electroconductive layer comprising:

~~any one of~~ an opening part or a depressed part formed in an insulating film on a substrate;

a barrier layer covering said opening part or said depressed part;

a metal growth promoting layer formed directly on said barrier layer, said metal growth promoting layer being made of a refractory metal ~~nitride~~ nitride different from a material of said barrier layer; and

an electroconductive layer embedded in said opening part or said depressed part via said barrier layer and said metal growth promoting layer, said electroconductive layer being formed of a Cu layer, ~~an Al~~ or an Al layer, an Al alloy layer having Al as a main component thereof, and said electroconductive layer being formed ~~directly on~~ and in contact with said metal growth promoting layer;

wherein said metal growth promoting layer is a TiN layer containing oxygen at a lower concentration than said barrier layer.

4. (Cancelled)

5. (Currently Amended) An embedded electroconductive layer comprising:

~~any one of~~ an opening part or a depressed part formed in an insulating layer on a substrate;

a ground layer made of ~~refractory metal nitride~~ TiN containing oxygen at a high concentration in the lower part thereof and at a low concentration in the upper part thereof, and said ground layer covering the surface of said insulating layer in said opening part or said depressed part; and

an electroconductive layer embedded in said opening part or said depressed part via said ground layer, said electroconductive layer being formed of a Cu layer, an Al layer, or an Al alloy layer having Al as a main component thereof, and said electroconductive layer being formed ~~directly on said upper part of~~ said ground layer and in contact with said upper part of said ground layer.

6-39. (Cancelled)

40. (Currently Amended) The embedded electroconductive layer according to claim 3, ~~wherein said first~~ wherein a material of said barrier layer is  $WN_x$ , where x is a variable such that  $0 \leq x \leq 1$ .

41. (Currently Amended) The embedded electroconductive layer according to claim 3, ~~wherein said first~~ wherein a material of said barrier layer is  $\text{TaN}_x$ , where x is a variable such that  $0 \leq x \leq 1$ .

42. (Currently Amended) The embedded electroconductive layer according to claim 3, ~~wherein said first~~ wherein a material of said barrier layer is amorphous  $\text{TiSiN}$ .

43. (Currently Amended) The embedded electroconductive layer according to claim 3, ~~wherein said first~~ wherein a material of said barrier layer is  $\text{Al}_2\text{O}_3$ .

44-48. (Cancelled)

49. (Previously Presented) The embedded electroconductive layer according to claim 3, wherein said metal growth promoting layer is a TiN layer formed by a chemical vapor deposition (CVD) process.